FILE COPY FOREST INSECT LABORATORY STANFORD UNIVERSITY CALIFORNIA

37.6-1a
6 36.

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

Insect Control, D-6.

Recommended Allotments for Insect Control for Spring of 1928 (F.Y.1928).

December 24, 1927.

A. J. Jacnicke,
Forest Examiner.

GOVERNMENT PRINTING OFFICE 8—6150

Only two insect control projects are proposed for the spring of 1928 (F.Y. 1928), namely:-

1. Continuation of insect control in yellow pine in the Bly region, Area 3 of the Southern Oregon-Northern California pine beetle control project. Allotment of $6,000 already set aside. Additional $1,500 needed for satisfactory completion of job, spring of 1928.

2. Clean-up of infested lodgepole in Sand Creek area on Crater National Forest, adjoining Crater National Park. About $2800 spent in spring of 1927. Additional $1,000 needed for the spring, 1928 control operations to cover untouched portion of lodgepole epidemic.

Area Three, Southern Oregon-Northern California Pine Beetle Control Project.

The general situation in Area 3 of this project was covered in Mr. Keen's report of June 27, 1927, and Mr. Jaenicke's report of June 28, 1927. Copies of these reports were sent to the Forester. With the findings in these reports as a guide, Assistant Forester Carter in August, 1927, set aside $6,000 to cover the Forest Service share of the control operations in the fall of 1927 and the spring of 1928.

In the latter part of September, 1927, J. E. Patterson of the Bureau of Entomology made an examination of the status of the pine beetle infestation in this area.

With these reports of Keen, Patterson, and Jaenicke as a basis, the Klamath Forest Protective Association and the Supervisor of the Fremont National Forest agreed to concentrate the control work in the fall of 1927 and the spring of 1928 in the Owens and Whitworth units. It was further agreed to adhere to the following:-

1. To follow the recommendations of the Bureau of Entomology as to the methods to be used and to follow its advice regarding the extent of the epidemic which will have to be covered to safeguard the results of the control work.

2. To exercise all reasonable precaution in the use of fire to prevent the scorching of both reproduction and

timber, whether on private lands or in national forest timber.

The intermingled character of the ownership of the area chosen for the control operations, made it administratively necessary to divide the territory. By such division the Forest Service would do control work on both private and national forest timber, and the Association would be responsible for control operations in both classes of ownership.

Just prior to the beginning of the control operations in October, 1927, the proposed control area was examined in its entirety. It was found that:-

1. The heaviest infestation existed in the private lands in the north end of the area and that therefore it was proper and right for the Association to assume the responsibility for the control work in the north half of the unit under the terms of an agreement quoted in this report.

2. The average volume of the infested tree was fairly uniform for the entire area under consideration. This fact makes the exchange of infested trees provided in the agreement, about to be quoted, fair and equitable.

In order to expedite the work and to keep control costs as low as was consistent with good results, the following agreement was entered into between the manager of the Klamath Forest Protective Association and the supervisor of the Fremont National Forest:-

MEMORANDUM OF AGREEMENT FOR BEETLE CONTROL OPERATIONS

ON OWENS UNIT.

"It is mutually agreed between Jackson F. Kimball, Manager of the Klamath Forest Protective Association, and Gilbert D. Brown, Supervisor of the Fremont National Forest, that beetle control operations for the fall and winter of 1927 shall be carried out in accordance with the recommendation of the Bureau of Entomology on the Owens Unit; that the Klamath Forest Protective Association will treat all private land within the unit agreed upon and that the

Forest Service will treat the National Forest land within the unit, provided, however, that in order to save duplication of travel and expense, thereby expediting the work and reducing the cost, that a division line will be made along the section lines running east and west one mile south of the township line between 37 and 38, Ranges 15 and 16, as a starting point for each operation, the Forest Service to handle the area south and the Klamath Forest Protective Association to handle the area north of said line.

"The unit for cooperation in this area will be a tree basis over 12 inches in diameter; smaller trees than 12 inches to be treated but not counted. For all trees over 12 inches in diameter treated on private land by the Forest Service an equal number of trees over 12 inches in diameter will be treated by the Association on Forest land.

"It is further understood and agreed that diligent effort will be made to prevent the spread of fire from burning operations by all parties concerned; that frequent inspections will be made by each party to this agreement to insure a satisfactory compliance with the agreement. Further, that so far as funds will permit the entire area outlined will be covered by control operations to the end that the most benefit may be secured.

"Dated this 31st day of October, 1927.

"By JACKSON F. KIMBALL
MANAGER KLAMATH FOREST PROTECTIVE ASSN.

By GILBERT D. BROWN
SUPERVISOR FREMONT NATIONAL FOREST"

For the carrying out of the Forest Service share of this work, the Forester set aside $6,000 in accordance with Mr. Jaenicke's report of June 28, 1927.

The fall control operations were confined to a period of about two months, from the middle of October to early November. The part of the area for which the Forest Service is responsible is accessible only by a rather difficult mountain road, much of the timber carries heavy underbrush and dense reproduction, and the general fire

hazard is so high during the dry season that extreme fire precautions are necessary. The fire hazard was such that during the latter part of October, burning was out of the question for almost the first two weeks of the project. The Forest Service control work was done under the immediate and personal supervision of Assistant Supervisor Frizzell, who has had several seasons of insect control experience and who by reason of his ability and experience again effected all possible economies in the doing of the work. In spite of this, the fall control work resulted in the treatment of about one million board feet of timber at an estimated cost of about $4.50 per thousand instead of the $4.00 per thousand provided for in Mr. Juenicke's report of June 28, 1927.

A balance of about $1500 remains for the Forest Service share of the spring, 1928 control operations. It is not possible to make more than a rough approximation of what it would cost to satisfactorily complete this job. On some sections, the infestation has exceeded the original estimates. To provide for all possible contingencies, it is safe to assume that an allotment of $1500 in addition to the $6,000 now available, will be required. Without this additional allotment, it will not be possible for the Association to provide for the satisfactory protection of the private lands under its jurisdiction within the boundaries of this project.

During the five-year period, 1922-1926 inclusive, there has been a yellow pine loss by beetles of at least 15 per cent. The 1926 loss is greater than the 1925 loss and there is evidence that the 1927 beetle loss will somewhat exceed that of 1926. There is no trustworthy evidence of a possible decline of beetle activity in the very near future. In the close vicinity of the area in which control operations are now being carried on, a considerable body of privately-owned yellow pine was sold for $4.00 per M. board feet. Without question, both the privately-owned and national forest timber included in this project will come on the market within the next ten years. The timber values, therefore, seem to justify the carrying out of this project.

The Sand Creek Project

In the spring of 1927, an allotment of $3,000 was available for the treatment of infested lodgepole on the Crater National Forest adjoining lodgepole areas on the Crater Lake National Park. The allotment was made to wipe out a beetle epidemic in national forest timber which was threatening to invade national park timber on which considerable control work had been done.

In cooperation with J. E. Patterson of the Bureau of Entomology and officers of the Crater National Forest, the national forest area to be covered was agreed upon. At a cost of about $2800, nearly 4,000 trees were treated. The original allotment of $3,000 proved inadequate to cover the entire infestation. A considerable block of timber north of Sand Creek Canyon remained untreated. Because of the initial expense of establishing camp and the difficulty of reaching the infested trees, it is believed that it will cost at least $1.25 per tree to treat this timber. There remain from 600 to 800 trees for treatment as nearly as can be judged from the green condition of the trees (November, 1927). It is felt, therefore, that an allotment of $1,000 should be available for the work.

The 1927 control operations were under the direction of Technical Assistant Lee P. Brown. The work was done well and efficiently under the handicap of unusually unfavorable snow conditions. Mr. Patterson's close cooperation was invaluable.

A. J. Jacnicke,
Forest Examiner.